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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/631,259

08/01/2003

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08/02/2007

EXAMINER

SAADAT, CAMERON

ART UNIT

PAPER NUMBER

3714

MAIL DATE

DELIVERY MODE

08/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/631,259

Applicant(s)

HSIEH ET AL.

Examiner

Cameron Saadat

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

In response to amendment filed 5/15/2007, claims 21-37 are pending in this application.

Claims 1-20 are cancelled.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21-37 are rejected under 35 U.S.C. 102(b) as being anticipated by McNerney –

Tangible Computation Bricks: Building-blocks for Physical Microworlds.

Regarding claim 21, McNerney discloses a stackable block comprising: a rigid member having a first surface with a protrusion thereon and a second surface having a receptacle; wherein the protrusion for mechanically stacking one stackable block to the receptacle of another stackable block, and the receptacle for receiving the protrusion of another stackable member (See P. 3, Col. 2); a memory for storage of at least one computer program instruction (See P. 4, col. 1), wherein when said plurality of stackable blocks are mechanically stacked, a plurality of instructions are electrically connected forming a computer program. See P. 4, col. 2, ¶ 4.

Regarding claim 22, McNerney discloses a rigid member of a Lego system® having a plurality of protrusions and a plurality of receptacles. See P. 3, col. 2.

Regarding claim 23, McNerney discloses a first surface and a second surface are substantially opposite to one another. See P. 3, col. 2.

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Regarding claim 24, McNerney discloses a device wherein the memory is a non-volatile memory for the storage of at least one instruction. See P. 4, col. 2.

Regarding claim 25, McNerney discloses a device wherein said non-volatile memory stores a plurality of instructions. See P. 4, col. 1, last paragraph.

Regarding claim 27, McNerney discloses a device wherein said non-volatile memory is electrically connected to said plurality of protrusions. See P. 4, Col. 1, paragraph 2.

Regarding claim 28, McNerney discloses a device wherein said non-volatile memory is electrically connected to the plurality of receptacles. See P. 4, Col. 1, paragraph 2.

Regarding claims 31 and 32, McNerney discloses a device further comprising: a port for connecting to another stackable block having a memory for storage of an unconditional branching computer program instruction. See P. 4, col. 1

Regarding claim 33, McNerney discloses a block for a toy comprising: a board having a first surface adapted to fit into a stack of one or more blocks each block having non-volatile memory for the storage of one or more computer program instructions forming a computer program; and a computer, in said board, for receiving said computer program from said stack when said stack is fitted to said board, and for executing said computer program. See P. 3, col. 2 – Page 4, col. 1.

Regarding claim 34, McNerney discloses a block wherein the board has a plurality of protrusions on the first surface, said protrusions adapted to fit into the stack. See P. 3, col. 2.

Regarding claim 35, McNerney discloses a block wherein the board having a plurality of receptacles adapted to fit into said stack. See P. 3, col. 2.

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Regarding claim 36, McNerney discloses a block further comprising a compiler associated with the computer for compiling said computer program from said stack to generate a compiled computer program and for executing the compiled computer program. See P. 3, col. 2 – Page 4, col. 1.

Regarding claim 37, McNerney discloses a block further comprising an interpreter associated with the computer for interpreting said computer program from the stack to generate an interpreted computer program and for executing said interpreted computer program. See P. 3, col. 2 – Page 4, col. 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 26 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over McNerney – Tangible Computation Bricks: Building-blocks for Physical Microworlds.

Regarding claim 26, McNerney discloses all of the claimed subject matter with the exception of explicitly disclosing the feature of storing a copyright protected work in the memory. However, the examiner takes official notice that the feature of storing copyrighted data in memory is old and well

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known for providing exclusive rights regulating the use on the stored data. Thus, it would have been obvious to one of ordinary skill in the art to modify the stored data described in McNerney, by providing copyrighted data, in order to regulate the use of the data.

Regarding claim 29, McNerney discloses all of the claimed subject matter with the exception of explicitly disclosing the feature of providing a block that is substantially rectilinearly shaped (as per claim 29) and asymmetrically shaped (as claim 30). However, the examiner takes official notice that the feature of providing LEGOS® that have various shapes is old and well known for creating various objects. Therefore it would have been obvious to one of ordinary skill in the art to modify the LEGOS® described in McNerney, by providing a rectilinear shaped block or an asymmetrical block, in order to construct various objects.

Response to Arguments

Applicant's arguments filed 5/15/2007 have been fully considered but they are not persuasive. It is argued that McNerney does not disclose the claimed limitation "for execution by a computer external to said block". The examiner disagrees. The blocks described in McNerney perform parallel computation of programs since the Logo program inside each brick runs at the same time as the programs in other bricks. In addition, each brick includes a microprocessor, and interacts with its neighboring brick. Therefore, McNerney teaches that programs are executed by a computer external to a single brick.

The examiner recognizes applicant's emphasis that the claimed blocks consist of memory and do not include microprocessors. However, these limitations are not claimed. It is noted that the claimed limitation "for execution by a computer external to said block" is a functional limitation. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case, the bricks described in McNerney are capable of executing programs external to a single brick, since each

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brick interacts with its neighboring brick. Thus, McNerney discloses bricks that are capable of executing programs on a computer external to a single brick. To help distinguish over the prior art of record, the examiner recommends amending the claims using structural language to indicate where the programs are executed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cameron Saadat whose telephone number is (571) 272-4443. The examiner can normally be reached on M-F 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cameron Saadat
July 31, 2007



Robert E Pezzuto
Supervisory Patent Examiner
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